

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Draft

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: 3M Cynthiana
Mailing Address: P.O. Box 33331, St. Paul, MN 55133-3331

Source Name: 3M Cynthiana
Mailing Address: 1308 New Lair Road
Cynthiana, KY 41031

Source Location: Same as above

Permit Number: V-06-015
Source A. I. #: 1752
Activity #: APE20040001
Review Type: Title V, Operating, PSD
Source ID #: 21-097-00021

Regional Office: Florence Regional Office
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County: Harrison

**Application
Complete Date:** February 1, 2000
Issuance Date:
Revision Date:
Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

WEB COATING LINES

Table 1 – Applicator Emission Point Numbers and Descriptions

Line No.	Emission Pt No.	Coater No.	Description	Construction Commenced	Oven	Control Equipment
1R Line	EP37	1RT-1	Tinter 1	Oct-94	none	none
	EP56	1RT-2	Tinter 2	13-May-96	Infrared Oven	none
	EP11a	1R1	Precoat 1	Aug-85	Oven 1R-O1	RTO1
	EP11a	1R2	Precoat 2	Aug-85	Oven 1R-O2	RTO1
	EP11a	1R3	Functional Coat	Aug-85	Oven 1R-O3	SRU1
2R Line	EP57	2RT-1	Tinter 1	13-May-96	none	none
	EP58	2RT-2	Tinter 2	13-May-96	none	none
	EP11b	2R1	Precoat 1	Aug-85	Oven 2R-O1	TO2
	EP11b	2R2	Precoat 2	Aug-85	Oven 2R-O2	TO2
	EP55	2R4	Precoat 3	26-Jan-96	none	none
	EP11b	2R3	Functional Coat	Aug-85	Oven 2R-O3	TO2
3R Line	EP22	3R1	LAB Station	15-Oct-01	Oven 3R-O1	TO3
	EP22	3R2	Hot Melt Applicator	05-Jun-89	none	none
	EP22	3R13	Hot Melt Applicator	15-Oct-01	none	none
4R Line	EP33	4RPC-1	Precoat 1	Jan-04	Oven 4R-O1	none
	EP34	4RPC-2	Precoat 2	11-Jul-91	Oven 4R-O2	RTO1
	EP35	4RF	Functional Coat	11-Jul-91	Oven 4R-O3	SRU1
5R Line	EP60	5R1A	Printing - Low VOC Ink	05-Oct-98	Infrared Oven	none
		5R1B	Printing - Low VOC Ink	05-Oct-98	Infrared Oven	none
	EP60	5R2	Low VOC Precoat 2	05-Oct-98	Oven 5R-O1	none
	EP60	5R3	Low VOC Precoat 3	05-Oct-98	none	none
	EP60	5RF	Low VOC Functional Coat	05-Oct-98	Oven 5R-O2	none
Cobra	EP61	1(A&B)	Printing - Low VOC Ink	Aug-06	UV Dryer	none
	EP61	1(C,D&E)	Printing - Low VOC Ink	Aug-06	UV & N.G.	none
	EP61	2(A)	Precoat #1 (Flexo)	Aug-06	N.G. Dryers	none
	EP61	3(A&B)	Precoat #2 (Flexo)	Aug-06	UV & N.G.	none
	EP61	F	Functional Coat (Die Coating)	Aug-06	RF Dryer	none

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

Table 1A – Webcoating Line Ovens

Line	Manufacturer	Heating Method (natural gas, steam, electric)	Heat Input Capacity (MMBtu/hr)	Date Constructed
1R Burner Box	CE Air Preheater	Natural Gas	14.3	1986
1RT-2		Electric / Infrared	n/a	
1R Oven 1		Recoup TO Heat	n/a	
1R Oven 2		Recoup TO Heat	n/a	
1R Oven 3 Z1-3		Recoup TO Heat	n/a	
2R Burner Box	CE Air Preheater	Natural Gas	14.3	1986
2R Oven 1		Recoup TO Heat	n/a	
2R Oven 2		Recoup TO Heat	n/a	
2R Oven 3 Z1-3		Recoup TO Heat	n/a	
3R Oven	CE Air Preheater Flynn	Steam and Recouped TO heat		2000
3R Flametreater		Natural Gas	1.4	
4R Oven 1	Thermo Electron	Natural Gas	3.85	1991
4R Oven 2	Thermo Electron	Natural Gas	3.85	1991
4R Oven 3 Zone1	Thermo Electron	Natural Gas	6.4	1991
4R Oven 3 Zone2	Thermo Electron	Natural Gas	6.4	1991
4R Oven 3 Zone3	Thermo Electron	Natural Gas	5.175	1991
4R Oven 3 Zone4	Thermo Electron	Natural Gas	3.85	1991
4R Oven 3 Zone5	Thermo Electron	Natural Gas	3.85	1991
5R1A	Megtec	Electric / Infrared	n/a	1998
5R1B		Electric / Infrared	n/a	1998
5R Oven 2		Natural Gas	5.175	1998
5R Oven 3 Z1		Natural Gas	3.85	1998
5R Oven 3 Z2		Natural Gas	3.85	1998
5R Oven 3 Z3		Natural Gas	3.85	1998
Cobra 1A		Electric / Infrared	n/a	2006
Cobra 1B		Electric / Infrared	n/a	2006
Cobra 1C		Infrared / Natural Gas	1.65	2006
Cobra 1D		Infrared / Natural Gas	1.65	2006
Cobra 1E		Infrared / Natural Gas	1.65	2006
Cobra 2A		Natural Gas	1.65	2006
Cobra 3A		Infrared / Natural Gas	1.65	2006
Cobra F		Electric RF	n/a	2006

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

Table 1B – Webcoating Line Supporting Equipment

Location		Description
1R Coater	1R Primer Station	1R / 2R Cleaning Cart (MEK)
	1R LAB Station	1R LAB Holding Tank
	1R Primer Station	1R Primer Holding Tank (25 gallons)
	1R Primer Station	1R Primer Side Tank (30 gallons)
	1R Primer Station	Solvent Storage Cabinet
2R Coater	2R PC2 Station	2R Cleaning Cart (IPA)
	2R PC2 Station	2R LAB Holding Tank
	2R PC1 Station	2R Primer Holding Tank (25 gallons)
	2R PC1 Station	2R Primer Side Tank (30 gallons)
		Die Cleaning Hood IPA Cleaning Solution Drums (55 gallon drums)
3R Coater	3R Bay	3R Resin Holding Tank IPA Cleaning Solution Drums (55 gallon drums) Parts Cleaning Tank
	3R Bay	Resin Compounding
	3R Bay	Supersack Powder Handling
4R Coater	4R PC2 station	4R Cleaning Cart (IPA)
	4R Adhesive Station	4R Cleaning Cart (MEK)
	4R PC2 station	4R LAB Holding Tank
	4R PC1 Station	4R Primer Holding Tank (25 gallons)
	4R PC1 Station	4R Primer Side Tank
Solvent Compounding	Room 161	Adhesive Mix Tank #1
	Room 161	Compounding Area 1
	Room 161	LAB Mix Tank
	Room 161	LAB Solids Tank
	Room 161	Lecithin Saddle Tank
	Room 161	Primer Homogenizer
	Room 161	Primer Mix Tank
	Room 162	Adhesive Mix Tank #2
	Room 162	Adhesive Storage Tank (5000 gallons)
	Room 162	Compounding Area 2
	Room 162	Heptane Surge Tank (Solvent)
	Room 162	LAB Storage Tank (2000 gallons)
	Room 162	Primer Storage Tank (2300 gallons)
	Room 162	RM 162 Adhesive Mix Tank
	Room 163	Compounding Area 3
	Room 163	MEK Cleaning Solution (55 gallon drums)
	Room 163	Myers Mixer
	Room 163	3R SPU LAB Storage Tank (2300 gallons)
	Room 163	3R SPU LAB Storage Tank (2300 gallons)
Waterbased Compounding		Cowles Mixer Lightning Mixer

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

Control Equipment:

RTO1 – Regenerative Thermal Oxidizer #1 – Controls applicators on Line 1R and 4R
Advanced Environmental Systems, Inc., ThermGen 85202J1
Natural Gas Fired (8.9 MMBtu/hr)
Installed: September 2003

TO1 – Recuperative Thermal Oxidizer #1 – Back-up for Line 1R applicators
CE Air Preheater, 29.9 TRG 48
Natural Gas Fired (21 MMBtu/hr)
Installed: November 1984

TO2 – Recuperative Thermal Oxidizer #2 – Applicators 2R1, 2R2, and 2R3
CE Air Preheater, 29.9 TRG 48
Natural Gas Fired (26.25 MMBtu/hr)
Installed: July 1985

TO3 – Recuperative Thermal Oxidizer #3
CE Air Preheater, 8.0TRG35
Natural Gas Fired (9.82 MMBtu/hr)
Installed: July 1985

SRU1 – Solvent Recovery Unit #1
3 Chamber Carbon Adsorption System
CEMS - Rosemount Analytical Flame Ionization Detectors at inlet and outlet
Installed: 1991

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

APPLICABLE REGULATIONS:

40 CFR Part 60, Subpart RR—Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations; applies to each coating line used in the manufacture of pressure sensitive tape and label materials, for which construction, modification, or reconstruction began after December 30, 1980.

40 CFR Part 63, Subpart KK—National Emission Standards for the Printing and Publishing Industry; applies to each facility that is a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated.

40 CFR Part 63, Subpart JJJJ—National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating; applies to each new and existing (*) facility that is a major source of HAP, at which web coating lines are operated.

* Existing affected source means any affected source the construction or reconstruction of which is commenced on or before September 13, 2000.

401 KAR 51:017—Prevention of significant deterioration of air quality; applies to major stationary sources or major modifications which commence construction after September 22, 1982, emit pollutants regulated by the Clean Air Act, and locate in an area designated attainment or unclassifiable.

401 KAR 59:210—New fabric, vinyl and paper surface coating operations. Applicable to each affected facility which is part of a major source located in a county designated attainment for ozone and commenced on or after June 24, 1992.

401 KAR 59:212—New graphic arts facilities using rotogravure and flexography. Applicable to each affected facility which is part of a major source located in a county designated attainment for ozone and commenced on or after June 24, 1992.

401 KAR 63:020—Potentially hazardous matter or toxic substances. Applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

APPLICABLE REGULATIONS: (continued)

Table 2 – Applicable Regulations

Line No.	Emission Pt No.	Coater No.	Description	Construction Commenced	Applicable Regulations						
					40 CFR Part 60, Subpart RR	40 CFR Part 63, Subpart JJJJ	40 CFR Part 63, Subpart KK	401 KAR 51:017	401 KAR 59:210	401 KAR 59:212	401 KAR 63:020
1R Line	EP37	1RT-1	Tinter 1	Oct-94	y	y	n	y	y	n	y
	EP56	1RT-2	Tinter 2	13-May-96	y	y	n	y	y	n	y
	EP11a	1R1	Precoat 1	Aug-85	y	y	n	y	n ²	n	y
	EP11a	1R2	Precoat 2	Aug-85	y	y	n	y	n ²	n	y
	EP11a	1R3	Functional Coat	Aug-85	y	y	n	y	n ²	n	y
2R Line	EP57	2RT-1	Tinter 1	13-May-96	y	y	n	y	y	n	y
	EP58	2RT-2	Tinter 2	13-May-96	y	y	n	y	y	n	y
	EP11b	2R1	Precoat 1	Aug-85	y	y	n	y	n ²	n	y
	EP11b	2R2	Precoat 2	Aug-85	y	y	n	y	n ²	n	y
	EP55	2R4	Precoat 3	26-Jan-96	y	y	n	y	y	n	y
	EP11b	2R3	Functional Coat	Aug-85	y	y	n	y	n ²	n	y
3R Line	EP22	3R1	LAB Station	15-Oct-01	y	y ¹	n	y	y	n	y
	EP22	3R2	Hot Melt Applicator	05-Jun-89	y	y	n	y	n ²	n	y
	EP22	3R13	Hot Melt Applicator	15-Oct-01	y	y ¹	n	y	y	n	y
4R Line	EP33	4RPC-1	Precoat 1	Jan-04	y	y ¹	n	y	y	n	y
	EP34	4RPC-2	Precoat 2	11-Jul-91	y	y	n	y	n ²	n	y
	EP35	4RF	Functional Coat	11-Jul-91	y	y	n	y	n ²	n	y
5R Line	EP60	5R1A	Printing	05-Oct-98	y	y	n	y	n	y	y
		5R1B	Printing	05-Oct-98	y	y	n	y	n	y	y
	EP60	5R2	Precoat 2	05-Oct-98	y	y	n	y	n	y	y
	EP60	5R3	Precoat 3	05-Oct-98	y	y	n	y	n	y	y
	EP60	5RF	Functional Coat	05-Oct-98	y	y	n	y	n	y	y
Cobra	EP61	1A-D	Printing	Aug-06	y	n	y	n	n	y	y
		1E	Printing	Aug-06	y	n	y	n	n	y	y
	EP61	2A	Precoat 1	Aug-06	y	n	y	n	n	y	y
	EP61	3A-B	Precoat 2	Aug-06	y	n	y	n	n	y	y
	EP61	F	Functional Coat	Aug-06	y	n	y	n	n	y	y

Notes

1. Applicator is considered part of an existing line for Subpart JJJJ applicability.
2. 401 KAR 59:210, effective 6-24-92 is not applicable, but control devices and procedures required by 401 KAR 59:210, effective 9-22-82 when the equipment was originally installed, must be continued.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****1. Operating Limitations:****A. 401 KAR 51:017, Section 16 (1), Source Obligation**

The permittee shall operate the affected facilities in accordance with the application submitted to the Cabinet under this administrative regulation.

B. 40 CFR Part 63, Subpart JJJJ

- (1) For thermal oxidizers and capture systems which are not permanent total enclosures, the permittee must:
 - (i) Demonstrate initial compliance for each capture system and each control device through performance tests;
 - (ii) Establish the operating limits for each capture system and control device during the performance testing; and,
 - (iii) Meet the operating limits at all times after establishing them.
- (2) For capture systems which are permanent total enclosures, the permittee shall:
 - (i) Demonstrate that a total enclosure is installed;
 - (ii) Monitor the capture system operating parameters at all times web coating is being performed.
- (3) For the solvent recovery systems, operate continuous emission monitoring systems and perform quarterly audits, § 63.3350(d).
- (4) At all times, the permittee must maintain the monitoring systems in proper working order including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment, § 63.3350(e)(6).

2. Emission Limitations:**A. 401 KAR 51:017**

Emission limitations for each of the affected facilities are the BACT limitations as approved by the Cabinet.

Compliance Demonstration Method:

- (1) See **Table 3** for options for demonstrating compliance with multiple regulations.
 - (i) Compliance can be demonstrated directly; or
 - (ii) Compliance is assumed when the permittee demonstrates compliance with an applicable Regulation having more stringent requirements.
- (2) See **Table 4** for Compliance Demonstration methods.
- (3) Perform monitoring and recordkeeping in accordance with **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**:

B. 40 CFR Part 60, Subpart RR, § 60.442 Standard for volatile organic compounds.

On and after the date on which the performance test required by §60.8 has been completed each owner or operator subject to this subpart shall:

- (1) Cause the discharge into the atmosphere from an affected facility not more than 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month; or

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****B. 40 CFR Part 60, Subpart RR, § 60.442 (continued)**

- (2) Demonstrate for each affected facility a 90 percent overall VOC emission reduction as calculated over a calendar month

Compliance Demonstration Method:

All facilities subject to Subpart RR are assumed in compliance with NSPS when the permittee demonstrates compliance with the applicable MACT or BACT requirements for that facility.

C. 40 CFR Part 63, Subpart KK, § 63.825 (b) Each product and packaging rotogravure or wide-web flexographic printing affected source shall limit emissions to;

- (1) No more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or
- (2) No more than 20 percent of the mass of solids applied for the month; or
- (3) Less than a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month.

Compliance Demonstration Method:

- (1) See **Table 3** for options for demonstrating compliance with multiple regulations.
 - (i) Compliance can be demonstrated directly; or
 - (ii) Compliance with Subpart KK emission limitations are assumed when the permittee demonstrates compliance with the 40 CFR 60, Subpart RR emission limitation of 0.20 kg VOC/kg of coating solids.
- (2) Perform monitoring and recordkeeping in accordance with **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**:

D. 40 CFR Part 63, Subpart JJJJ, § 63.3320 (b) The permittee must limit organic HAP emissions to the level specified in paragraph (b)(1), (2), or (3) of this section.

- (1) No more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources; or
- (2) No more than 4 percent of the mass of coating materials applied for each month at existing affected sources; or
- (3) No more than 20 percent of the mass of coating solids applied for each month at existing affected sources.

Compliance Demonstration Method:

- (3) See **Table 3** for options for demonstrating compliance with multiple regulations.
 - (i) Compliance can be demonstrated directly; or
 - (ii) Compliance is assumed when the permittee demonstrates compliance with an applicable Regulation having more stringent requirements.
- (4) Perform monitoring and recordkeeping in accordance with **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES**

E. **401 KAR 59:210, Section 3, Standard for VOCs.** The permittee shall not discharge into the atmosphere more than fifteen (15) percent by weight of the VOCs net input into the affected facility based on an averaging period not to exceed twenty-four (24) hours.

Compliance Demonstration Method:

- (1) See Section D(4)(A) for calculation of VOC emissions from controlled facilities, or;
- (2) Any affected facility coating fabric or paper shall be exempt from Section 3 of this administrative regulation if the VOC content of the coating is less than 0.35 kg/l of coating (two and nine-tenths (2.9) lb/gal), excluding water or exempt solvent or both, delivered to the applicators associated with the coating line [59:210, Section 6 (1)].
- (3) Determine the VOC content of all materials used in accordance to Method 24 or the Manufacturers formulation data as described in Section D(2)(A).
- (4) If the as-purchased coating material is applied to the web without any solvent or other material added, then the affected facility is exempt from the emission limitation of Section 3, if each coating material applied is applied as-purchased, and each contains no more than 2.9 lb/gal VOC.
- (5) The permittee must calculate the as-applied VOC content of as-purchased coating materials which are reduced, thinned, or diluted prior to application.
- (6) Calculate the as-applied volatile organic content of each coating material using Equation 1c, of Section D (3)(B)(6) of this permit.
- (7) If the coating material as delivered to the applicators contains no more than 2.9 lb/gal VOC the affected facility is exempt from the emission limitation of 59:210, Section 3.
- (8) The permittee shall keep **daily** records,
 - (i) Of all coating materials used at each affected facility in addition to the VOC content of each material used, and any calculations necessary to demonstrate exemption from the emission limits of 401 KAR 59:210, Section 3.
 - (ii) Of all monitoring and recordkeeping in accordance with **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** for each controlled workstation.

F. **Applicators Exempt from 401 KAR 59:210.** Applies to each of the following;

EP 11a; 1R1, 1R2, 1R3

EP 11b; 2R1, 2R2, 2R3

EP 22; 3R-2

EP 34; 4R-PC2

EP 35; 4R-F

- (1) The permittee shall not discharge into the atmosphere more than fifteen (15) percent by weight of the VOCs net input into the affected facility based on an averaging period not to exceed twenty-four (24) hours.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

F. **Applicators Exempt from 401 KAR 59:210 (continued)**

- (2) Any applicator above shall be exempt from the eighty-five (85) percent control requirement if the VOC content of the coating is less than 0.35 kg/l of coating (two and nine-tenths (2.9) lb/gal), excluding water or exempt solvent or both, as delivered to the applicators.

Compliance Demonstration Method:

The permittee will show compliance using the methods of Compliance Demonstration for Regulation 401 KAR 59:210 as listed above, **2. Emissions Limitations: D.**

G. **401 KAR 59:212, Section 3, Standard for VOCs.** The permittee shall not discharge into the atmosphere more than thirty-five (35) percent by weight of the VOCs net input into the affected facility based on an averaging period not to exceed twenty-four (24) hours. Any affected facility coating fabric or paper shall be exempt from the emission limitation of 59:212, Section 3 if all printing and coating stations;

- (1) Utilize a waterborne ink (and coatings) whose volatile portion consists of seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) for all applicators; or
- (2) Utilize inks (and coatings) which, excluding water, contain sixty (60) percent or more by volume nonvolatile material as applied to the substrate; or
- (3) Utilize inks with an emission limit of five-tenths (0.5) lb VOC/lb solids as delivered to the applicator.

Compliance Demonstration Method:

- (1) Determine the VOC and Solids content of all materials used by Method 24 or the Manufacturers formulation data as described in Section D(2)(A).
- (2) Convert VOC and Solids content from weight percentages to volume percentages as necessary.

$$\% \text{ vol.solvent} = \sum_{i=1}^n \frac{\text{wt.solvent}_i}{\text{densitysolvent}_i}$$

and,

$$\% \text{ vol.solids} = 100 - \% \text{ vol.solvent}$$

where; wt.solvent = pounds of solvent "i" in (1) gallon of ink or coating.

densitysolvent = density of VOC component "i".

n = total number of solvents in a given ink or coating

i = solvent component "i" of coating material

- (3) If the as-purchased ink or coating material is applied to the web without any solvent or other material added, then the affected facility is exempt from the emission limitation of Section 3, if each coating material applied is applied as-purchased, and each contains;
 - (i) Seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) for all applicators; or
 - (ii) Sixty (60) percent or more by volume nonvolatile material as applied to the substrate;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

- (4) Alternatively, calculate the VOC content of all coating materials on the basis of coating solids applied:

$$V_s = \frac{\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} - M_{vret}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij}}$$

Where:

- V_s = Daily average, as-applied, VOC to coating solids ratio, lb VOC / lb coating solids applied.
- p = Number of different coating materials applied during the day.
- C_{vi} = Volatile organic content of coating material, i , expressed as a mass fraction, lb/lb.
- M_i = Mass of as-purchased coating material, i , applied, lb.
- q = Number of different materials added to the coating material.
- C_{vij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.
- M_{ij} = Mass of material, j , added to as purchased coating material, i , lb.
- M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.
- C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, lb/lb.
- C_{sij} = Coating solids content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.
- (5) If each coating material as-applied contains less than five-tenths (0.5) lb VOC/lb solids as delivered to the applicator then the affected facility is exempt from the emission limitation of Section 3.
- (6) The permittee shall keep **daily** records of all coating materials used at each affected facility in addition to the VOC content of each material used, and any calculations necessary to demonstrate exemption from the emission limits of 401 KAR 59:212, Section 3.

H. **401 KAR 63:020.**

No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

Table 3 – Emission Limitations Summary

Line 1R and Line 2R

Controlled	Regulation	Emission Limitations	Compliance Demonstration Methods
1R1, 1R2, 1R3, 2R1, 2R2, 2R3 combined	401 KAR 59:210	Overall VOC control efficiency shall be at least 85%. Daily average.	Daily VOC Capture and Control Efficiency Monitoring & Recordkeeping
	40 CFR Part 63 Subpart JJJJ	Overall control efficiency shall be at least 95%. Monthly average.	Capture and Control Efficiency at 95% or better. Monitoring & Recordkeeping.
Uncontrolled	Regulation	Emission Limitations	Compliance Demonstration Methods
1R Line	401 KAR 51:017	Not more than 0.14 kg VOC/kg of coating solids applied. Monthly average.	Compliant Coatings and Recordkeeping. Daily averages; (Section D.2.A & Sections D.3.A & B, Eq. 1c & Section D.3.D, Eq. 4c). Monthly averages; (Section D.2.A & Sections D.3.C, Eq. 2 & Eq. 3b & Section D.3.E, Eq. 5b).
	401 KAR 59:210	VOC content of the coatings less than 2.9 lb/gal. Daily average.	
2R Line	401 KAR 51:017	Not more than 0.14 kg VOC/kg of coating solids applied. Monthly average.	
	401 KAR 59:210	VOC content of the coatings less than 2.9 lb/gal. Daily average.	
Additional Limitations			Compliance Demonstration Methods
1R1, 1R2, 1R3, 2R1, 2R2, 2R3 combined	1) VOC emissions shall not exceed 278.1 lbs/hr and 1218.0 tpy. 2) VOC from cleanup solvent shall not exceed 1.14 lbs/hr and 4.99 tpy.		Each month, calculate and record, monthly totals, monthly averages and 12-month rolling totals
1R Line	VOC emissions shall not exceed 47,946.4 lbs/month.		
2R Line	VOC emissions shall not exceed 37,485.5 lbs/month.		

Line 3R

Controlled	Regulation	Emission Limitations	Compliance Demonstration Methods
3R Line	401 KAR 51:017	VOC emissions shall be no more than 0.019 lbs/lb of coating solids applied. Monthly average.	Use Compliant Coatings VOC Capture and Control Efficiency Monitoring & Recordkeeping
Show compliance with above, and either of the two options below.			
<i>Option 1</i>	401 KAR 59:210	Overall VOC control efficiency shall be at least 85%. Daily average.	Daily VOC Capture and Control Efficiency Monitoring & Recordkeeping
<i>Option 2</i>	401 KAR 59:210	VOC content of the coatings less than 2.9 lb/gal. Daily average.	Compliant Coatings, (Section D.3) and Recordkeeping
Additional Limitations			Compliance Demonstration Methods
3R Line	VOC emissions less than or equal to 51.5 tpy (12-month rolling total)		Each month, calculate and record VOC emissions for the month and a new 12-month rolling total

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

WEB COATING LINES

Table 3 – Emission Limitations Summary (continued)

Line 4R

Controlled	Regulation	Emission Limitations	Compliance Demonstration Methods
4R Line	401 KAR 51:017	Overall VOC control efficiency shall not be less than 98% for the entire 4R Coater line.	VOC Capture and Control Efficiency Monitoring & Recordkeeping
	401 KAR 59:210	Overall VOC control efficiency shall be at least 85%. Daily average.	Daily VOC Capture and Control Efficiency Monitoring & Recordkeeping
Additional Limitations			Compliance Demonstration Methods
4R Line	VOC emissions shall not exceed 329 tpy. (12-month rolling total) MEK cleanup solvent usage shall not exceed 620 gal/yr for the entire 4R Line. IPA cleanup solvent usage shall not exceed 360 gal/yr for the entire 4R Line.		Each month, calculate and record VOC emissions for the month and a new 12-month rolling total. Keep monthly records of emissions & solvent usage.

Line 5R

Uncontrolled	Regulation	Emission Limitations	Compliance Demonstration Methods
5R Line	401 KAR 51:017	Not more than 0.14 kg VOC/kg of coating solids applied	Compliant Coatings, (Section D.3) and Recordkeeping
Show compliance with above, and either of the three options below.			
<i>Option 1</i>	401 KAR 59:212	Utilize a waterborne ink whose volatile portion consists of 75 volume percent water and 25 volume percent organic solvent	Compliant Coatings, (Section D.3) and Recordkeeping
<i>Option 2</i>	401 KAR 59:212	Utilize inks which, excluding water, contain 60% or more by volume nonvolatile material as applied to the substrate	Compliant Coatings, (Section D.3) and Recordkeeping
<i>Option 3</i>	401 KAR 59:212	Utilize inks with an emission limit of 0.5 lb VOC/lb solids as delivered to the applicator	Compliant Coatings, (Section D.3) and Recordkeeping
Additional Limitations			Compliance Demonstration Methods
5R Line	VOC emissions shall not exceed 200 tpy. (12-month rolling total)		Calculate & record monthly

Cobra Line

Uncontrolled	Regulation	Emission Limitations	Compliance Demonstration Methods
Cobra	40 CFR Part 60 Subpart RR	Not more than 0.20 kg VOC/kg of coating solids applied	Compliant Coatings, (Section D.3) and Recordkeeping
Show compliance with above, and any one of the three options below.			
<i>Option 1</i>	401 KAR 59:212	Utilize a waterborne ink whose volatile portion consists of 75 volume percent water and 25 volume percent organic solvent	Compliant Coatings, (Section D.3) and Recordkeeping
<i>Option 2</i>	401 KAR 59:212	Utilize inks which, excluding water, contain 60% or more by volume nonvolatile material as applied to the substrate	Compliant Coatings, (Section D.3) and Recordkeeping
<i>Option 3</i>	401 KAR 59:212	Utilize inks with an emission limit of 0.5 lb VOC/lb solids as delivered to the applicator	Compliant Coatings, (Section D.3) and Recordkeeping

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****3. Testing Requirements:**

- A. 40 CFR Part 63, Subpart A requires completion of all initial performance tests no later than 180 days following the compliance date for such sources, § 63.7(a)(2).
 - (1) For existing sources under Subpart JJJJ, the compliance date is December 4, 2005.
 - (2) For new construction the compliance date is the equipment start-up date.
- B. Thermal Oxidizers, § 63.3360(e)(3)(i).
 - (1) During the performance test, monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. Monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
 - (2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the thermal oxidizer.
- C. Capture Efficiency, § 63.3360(f).
 - (1) You may assume your capture efficiency equals 100 percent if your capture system is a Permanent Total Enclosure (PTE). You must confirm that your capture system is a PTE by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M, and that all exhaust gases from the enclosure are delivered to a control device.
 - (2) You may determine capture efficiency according to the protocols for testing with temporary total enclosures that are specified in Methods 204 and 204A through F of 40 CFR part 51, appendix M.
- D. The permittee must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Operations during periods of startup, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test, § 63.3360(e)(2).

4. Specific Monitoring Requirements:

- A. Solvent recovery device, § 63.3370(i)(2)
 - (1) Continuously monitor the gas stream entering and exiting the control device to determine the total organic volatile matter mass flow rate (e.g., by determining the concentration of the vent gas in grams per cubic meter and the volumetric flow rate in cubic meters per second such that the total organic volatile matter mass flow rate in grams per second can be calculated) such that the control device efficiency can be calculated for each month using Equation 2 of § 63.3360.
 - (2) Capture and control efficiency monitoring.
Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with § 63.3350(f) to ensure capture efficiency.
 - (3) Determine the percent capture efficiency in accordance with § 63.3360(f).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****4. Specific Monitoring Requirements: (continued)****B. Thermal Oxidizers, § 63.3370(j) & (k).**

- (1) Determine the oxidizer destruction efficiency using the procedure in § 63.3360(e).
- (2) Determine the capture system capture efficiency in accordance with § 63.3360(f).
- (3) Capture and control efficiency monitoring.
Whenever a web coating line is operated, continuously monitor the operating parameters established in accordance with § 63.3350(e) and (f) to ensure capture and control efficiency.

C. Bypass and coating use monitoring, § 63.3350 (c).

For all intermittently controlled work stations, the permittee must monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass.

D. Refer to Section F for general monitoring requirements.**5. Specific Recordkeeping Requirements:****A. § 63.10(b)(1)**

The permittee shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

B. § 63.10(b)(2)

The permittee shall maintain relevant records for all affected sources of each—

- (1) Occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- (2) Occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- (3) All required maintenance performed on the air pollution control and monitoring equipment;
- (4) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3));
- (5) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction are consistent with the procedures specified in such plan.
- (6) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****5. Specific Recordkeeping Requirements: (continued)**

- (7) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - (i) Specific information to be recorded shall include;
 - a) Maintain a calendar month record of all coatings used and the results of the reference test method 24 or the manufacturer's formulation data used for determining the VOC content of those coatings, § 60.445(a);
 - b) Continuous emission monitor data for the solvent recovery devices in accordance with the requirements of § 63.3350(d);
 - c) Maintain a calendar month record of the amount of solvent applied in the coating at each affected facility controlled by a solvent recovery device, § 60.445(b);
 - d) Control device and capture system operating parameter data in accordance with the requirements of § 63.3350(c), (e), and (f);
 - e) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(c);
 - f) Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(d);
 - g) Overall control efficiency determination using capture efficiency and control device destruction or removal efficiency test results in accordance with the requirements of § 63.3360(e) and (f); and
 - h) Material usage, organic HAP usage, VOC usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of § 63.3370(b), (c), and (d).
 - i) Maintain monthly records of the amount of any solvent containing materials recovered and shipped off site for disposal. If the VOC and/or HAP content of the waste material is determined by EPA test methods or a Division approved alternative, then the amount of VOC/HAP in the waste can be subtracted from the total purchased VOC/HAP when calculating emissions. Otherwise, the VOC and/or HAP emitted shall be assumed equivalent to the VOC and HAP purchased and used during the month.
- (8) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- (9) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- (10) All CMS calibration checks;
 - (ii) For each CEM a record of all quarterly audits, § 63.3350(d)(1)(ii).
 - (iii) Record the results of each inspection, calibration, and validation check of each CPMS, § 63.3350(e)(5).
- (11) All adjustments and maintenance performed on the CMS;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****6. Specific Reporting Requirements:**

- A. Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six month period. Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
 - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- B. Following the initial performance test, the owner or operator of each affected facility shall submit quarterly reports to the Administrator of exceedances of the VOC emission limits specified. If no such exceedances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually, §60.447(b).
- C. The owner or operator of each affected facility shall also submit reports quarterly when the incinerator temperature drops below the established operating limit. If no such periods occur, the owner or operator shall state this in the semiannual report, §60.447(c).
- D. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation, and you must notify the Administrator in accordance with § 63.3400(c), § 63.3350(e)(8).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**WEB COATING LINES****7. Specific Control Equipment Operating Conditions:****A. Thermal Oxidizer.**

The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.3360(e)(3)(i).

- (1) Collect the combustion temperature data according to § 63.3350(e)(9);
- (2) Reducing the data to 3-hour block averages; and
- (3) Maintain the 3-hour average combustion temperature at or above the temperature limit.

B. Continuous parameter monitoring system (CPMS), § 63.3350(e).

- (1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation to have a valid hour of data.
- (2) You must have valid data from at least 90 percent of the hours during which the process operated.
- (3) You must determine the hourly average of all recorded readings according to paragraphs (i) and (ii) of this section.
 - (i) To calculate a valid hourly value, you must have at least three of four equally spaced data values from that hour from a continuous monitoring system (CMS) that is not out-of-control.
 - (ii) Provided all of the readings recorded in accordance with paragraph (e)(3) of section § 63.3350 clearly demonstrate continuous compliance with the standard that applies to you, then you are not required to determine the hourly average of all recorded readings.
- (4) The permittee must determine the rolling 3-hour average of all recorded readings for each operating period. To calculate the average for each 3-hour averaging period, you must have at least two of three of the hourly averages for that period using only average values that are based on valid data (i.e., not from out-of-control periods).

C. Capture system monitoring plan.

- (1) Submit monitoring plan to the Division that identifies operating parameters to be monitored according to § 63.3350(f).
- (2) Conduct monitoring according to the plan, § 63.3350(f)(3).

D. See Section E for additional requirements including monitoring equipment installation, initial calibration, ongoing verification, and development of the Capture system monitoring plan.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

BOILERS

EP08 (08) Two (2) Natural Gas Fired Boilers

Description: (2) Cleaver Brooks, Indirect Heat Exchangers
Natural gas-fired
Maximum continuous rating: (12.5 MMBtu/hr) each
Installed: April 11, 1985
Control Equipment: None

EP21 (21) One (1) Natural Gas Fired Boiler

Description: Kewanee Indirect Heat Exchanger
Natural gas-fired w/ #2 fuel oil backup
Maximum continuous rating: (16.74 MMBtu/hr)
Installed: June 5, 1989
Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:015—New indirect heat exchangers. Applicable with respect to particulate emissions and sulfur dioxide emissions to each affected facility with a capacity of 250 MMBtu/hr or less and commenced on or after April 9, 1972.

40 CFR Part 63, Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; applies to each existing large gaseous fuel and each existing large liquid fuel industrial boiler or process heater located at a major source.

1. Operating Limitations:

The maximum weight percentage of sulfur in the No. 2 fuel oil shall not exceed 0.5%.

2. Emission Limitations:

401 KAR 59:015

Section 4(2) limits visible emissions from each stack to less than 20% opacity except:

- 4(2)(b) A maximum of 40% opacity shall be permissible for not more than 6 consecutive minutes in any 60 consecutive minutes during cleaning the firebox or blowing soot.
- 4(2)(c) For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method:

- (1) The boilers are considered to be in compliance when firing natural gas.
- (2) See **4. Specific Monitoring Requirements**
- (3) See **5. Specific Recordkeeping Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**BOILERS****2. Emission Limitations: (continued)****Emission Point (8) – PM and SO₂ Emissions Limitations**

- A. Section 4(1)(c) limits emissions of particulate matter to 0.45 pounds per million BTU actual heat input.

Compliance Demonstration Method:

The boilers are considered to be in compliance when firing natural gas.

- B. Section 5(1)(c) limits emissions of sulfur dioxide to 2.06 pounds per million BTU actual heat input.

Compliance Demonstration Method:

The boilers are considered to be in compliance when firing natural gas.

Emission Point (21) – PM and SO₂ Emissions Limitations

- A. Section 4(1)(c) limits emissions of particulate matter to 0.40 pounds per million BTU actual heat input.

Compliance Demonstration Method:

- (1) The boiler is considered to be in compliance when firing natural gas.
- (2) The boiler is considered to be in compliance when firing No. 2 fuel oil.
- (3) See **3. Testing Requirements**
- (4) See **4. Specific Monitoring Requirements**
- (5) See **5. Specific Recordkeeping Requirements**

- B. Section 5(1)(c) limits emissions of sulfur dioxide to 1.67 pounds per million BTU actual heat input.

Compliance Demonstration Method:

- (1) The boiler is considered to be in compliance when firing natural gas.
- (2) The boiler is considered to be in compliance when the weight percent sulfur in the #2 fuel oil does not exceed 0.5% as required by **1. Operating Limitations**
- (3) See **3. Testing Requirements**
- (4) See **4. Specific Monitoring Requirements**
- (5) See **5. Specific Recordkeeping Requirements**

3. Testing Requirements:

- A. Pursuant to 401 KAR 59:015, Section 8, particulate, sulfur dioxide and visible emission limitations specified herein shall be measured by EPA Reference Methods 5,6 and 9 respectively, 40 CFR 60, Appendix A.
- B. The permittee shall conduct at least one performance test for particulate matter (PM), opacity, and sulfur dioxide (SO₂) emissions while combusting No. 2 fuel oil if the boiler is operated exclusively on No. 2 fuel oil for any period greater than (6) six months.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**BOILERS****4. Specific Monitoring Requirements:**

- A. The permittee shall monitor the type and amount of each fuel burned.
- B. No other specific monitoring is required when the boilers are fired with natural gas.
- C. The permittee shall monitor the heating value and sulfur content of No. 2 fuel oil combusted. The permittee may use fuel supplier certification to meet this requirement.
- D. When firing #2 fuel oil, the permittee shall perform a qualitative visual observation of the opacity of emissions from the stacks.
 - (1) Within 8-hours of stabilization after start-up on No. 2 fuel oil, and
 - (2) Not less than once per week while operating continuously with No. 2 fuel oil. If visible emissions are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then the permittee shall initiate an inspection and repair of the equipment.

5. Specific Recordkeeping Requirements:

- A. The permittee shall keep a monthly record of the type and amount of each fuel used.
- B. The permittee shall record the dates and times when the boilers are firing each fuel.
- C. For each purchase of the No. 2 fuel oil, the permittee shall keep records the sulfur content and fuel lower heating value.
- D. The permittee shall keep a log of the qualitative opacity observations, including the date, time and the identity of the person making the record.
- E. The permittee shall keep all records of regular maintenance and any necessary repairs to the equipment.

6. Specific Reporting Requirements: None**7. Specific Control Equipment Operating Conditions: None****8. Alternate Operating Scenarios: None**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

BOILERS

EP32 (32) One (1) Natural Gas Fired Boiler

Description: Tampella Indirect Heat Exchanger

Natural gas-fired w/ #2 fuel oil backup

Maximum continuous rating: (39.04 MMBtu/hr)

Installed: July 29, 1991

Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:015—New indirect heat exchangers. Applicable with respect to particulate emissions and sulfur dioxide emissions to each affected facility with a capacity of 250 MMBtu/hr or less and commenced on or after April 9, 1972.

40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; applies to each steam generating unit commenced after June 9, 1989 that has a maximum design heat input capacity between 10mmBtu/hr and 100mmBtu/hr.

40 CFR Part 63, Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters; applies to each existing large gaseous fuel and each existing large liquid fuel industrial boiler or process heater located at a major source.

1. Operating Limitations:

The maximum weight percentage of sulfur in the No. 2 fuel oil shall not exceed 0.5%.
(40 CFR 60.42c)

2. Emission Limitations:

401 KAR 59:015

Opacity Limits for Natural Gas Firing

- A. Section 4(2) limits visible emissions from each stack to less than 20% opacity except:
- 4(2)(b) A maximum of 40% opacity shall be permissible for not more than 6 consecutive minutes in any 60 consecutive minutes during cleaning the firebox or blowing soot.
 - 4(2)(c) For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method:

The boiler is considered to be in compliance when firing natural gas.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**BOILERS****2. Emission Limitations: (continued)****401 KAR 59:015**

- B. Section 4(1)(c) limits emissions of particulate matter to 0.34 pounds per million BTU actual heat input.

Compliance Demonstration Method:

- (1) The boiler is considered to be in compliance when firing natural gas.
- (2) The boiler is considered to be in compliance when firing No. 2 fuel oil.
- (3) See 3. **Testing Requirements**

40 CFR 60.43c (c)

- C. While burning oil, no operator or owner shall cause to be discharged into the atmosphere from that facility any gases that shall exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Compliance Demonstration Method:

- (1) See 4. **Specific Monitoring Requirements**
- (2) See 5. **Specific Recordkeeping Requirements**

40 CFR 60.42c (d)

- D. Emissions of sulfur dioxide shall be limited to 0.50 pounds per million BTU actual heat input.

Compliance Demonstration Method:

- (1) The boiler is considered to be in compliance when firing natural gas.
- (2) The boiler is considered to be in compliance when the weight percent sulfur in the No. 2 fuel oil does not exceed 0.5% as required by 1. **Operating Limitations**
- (3) See 3. **Testing Requirements**
- (4) See 4. **Specific Monitoring Requirements**
- (5) See 5. **Specific Recordkeeping Requirements**

3. Testing Requirements:

- A. Pursuant to 401 KAR 59:015, Section 8, particulate, sulfur dioxide and visible emission limitations specified herein shall be measured by EPA Reference Methods 5,6 and 9 respectively, 40 CFR 60, Appendix A.
- B. Alternatively, the performance test for SO₂ may consist of certification of the fuel sulfur content as described under 60.48c(f)(1). [40 CFR 60.44c(h)]
- C. The permittee shall conduct at least one performance test for particulate matter (PM), opacity, and sulfur dioxide (SO₂) emissions while combusting No. 2 fuel oil if the boiler is operated exclusively on No. 2 fuel oil for any period greater than (6) six months.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**BOILERS****4. Specific Monitoring Requirements:**

- A. The permittee shall monitor the type and amount of each fuel burned.
- B. No other specific monitoring is required when the boiler is fired with natural gas.
- C. The permittee shall monitor the heating value and sulfur content of No. 2 fuel oil combusted. The permittee may use fuel supplier certification to meet this requirement.
- D. When firing No. 2 fuel oil, the permittee shall perform a qualitative visual observation of the opacity of emissions from the stacks.
 - (3) Within 8-hours of stabilization after start-up on No. 2 fuel oil, and
 - (4) Not less than once per week while operating continuously with No. 2 fuel oil. If visible emissions are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then the permittee shall initiate an inspection and repair of the equipment.

5. Specific Recordkeeping Requirements:

- A. The permittee shall keep a monthly record of the type and amount of each fuel used.
- B. The permittee shall record the dates and times when the boiler is firing each fuel.
- C. For each purchase of the No. 2 fuel oil, the permittee shall keep records the sulfur content and fuel lower heating value.
- D. The permittee shall keep a log of the qualitative opacity observations, including the date, time and the identity of the person making the record.
- E. The permittee shall keep all records of regular maintenance and any necessary repairs to the equipment.

6. Specific Reporting Requirements:

- A. The permittee shall submit to the Division the performance test data from the initial and any subsequent performance tests, §60.48c(b).
- B. The permittee shall submit excess emission reports every 3-months for any excess emissions from the affected facility which occurred while firing No. 2 fuel oil during the reporting period. If no excess emissions occurred during the calendar quarter, the permittee shall submit a report semi-annually stating that no excess emissions occurred during the semi-annual reporting period, §60.48c(c).
- C. The permittee shall submit quarterly reports to the Division. All reports shall be postmarked by the 30th day following the end of the reporting period, §60.48c(d). Reports shall contain the following information.
 - (1) Calendar dates covered in the reporting period.
 - (2) Each 30-day average SO₂ emission rate (nj/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**BOILERS****6. Specific Reporting Requirements: (continued)**

- (3) Each 30-day average percent of potential SO₂ emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO₂ data has not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which oil was not combusted in the steam generating unit.
- (6) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification shall include the following information.
 - i. The name of the oil supplier; and
 - ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c.
 - iii. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

7. Specific Control Equipment Operating Conditions: None**8. Alternate Operating Scenarios: None**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)15 J Polypropylene Line**Description:**

15J-1 (15J-1)	Resin Conveying System (1) Cumberland Grinder (2/1989) (2) Alpine Grinders (2/1989) Barron Pellet Feed Hopper with Cyclonic Separator (1994) Maximum continuous rating: 4200 lb/hr
15J-9 (15J-9)	(2) Corona Treaters Sherman 52 kW Installed: 1989
15J-16 (15J-16)	Fluff Hopper 1 Barron VSH900-1DS6 Vertical Storage Hopper Maximum continuous rating: 950 lb/hr Installed: 1994
15J-17 (15J-17)	Fluff Hopper 2 Barron VSH900-1DS6 Vertical Storage Hopper Maximum continuous rating: 950 lb/hr Installed: 1994
15J-18 (15J-18)	2 Pellet Hoppers Custom Vertical Hoppers w/ single tube pellet headers Maximum continuous rating: 1200 lb/hr Installed: 1994
15J-19 (15J-19)	Pelletizer Battenfeld Extruder w/ feed hopper & Barron HE-72 cyclone Maximum continuous rating: 1200 lb/hr Installed: 1994
15J-20 (15J-20)	Pellet Dryer Beringer Air Dryer Maximum continuous rating: 1200 lb/hr Installed: 1994
15J-21 (15J-21)	Laser Edge Trimmer Maximum continuous rating: 4200 lb/hr Installed: 1994
15J-22 (15J-22)	TBH Extruder Maximum continuous rating: 4200 lb/hr Installed: 1998

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)15 J Polypropylene Line**1. Operating Limitations:**

401 KAR 59:010

Particulate filters shall be in place and functional at all times of operation.

2. Emission Limitations:

401 KAR 59:010

- (1) Section 3(1)(a) limits visible emissions from each stack to less than 20% opacity.

Compliance Demonstration Method:

Compliance is assumed when the particulate filters are in place and operating according to the manufacturer's recommendations. See, **1. Operating Limitations**, and **7. Specific Control Equipment Operating Conditions**.

- (2) Section 3(2) limits emissions of particulate matter to 5.69 lbs/hr at the maximum rate of 4200 lbs/hour. For process rates between 1000 lbs/hr and 3200 lbs/hr, the allowable emissions should be calculated from the following equation;

$$E = 3.59 * P^{0.62}$$

Where, E = rate of emission in lb/hr

P = process weight rate in tons/hr

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.34 lbs/hr.

Compliance Demonstration Method:

Compliance is assumed when the particulate filters are in place and operating according to the manufacturer's recommendations. See, **1. Operating Limitations**, and **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

If deemed necessary, the Cabinet shall require testing for particulate emissions in accordance with 40 CFR 60 Appendix A, Methods 5 and 9.

4. Specific Monitoring Requirements: None**5. Specific Recordkeeping Requirements:** None**6. Specific Reporting Requirements:** None**7. Specific Control Equipment Operating Conditions:**

The filters shall be maintained and operated in accordance with the manufacturer's recommendations.

8. Alternate Operating Scenarios: None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**STORAGE TANKS**

T1A	(T1A)	Heptane Storage Tank, Tank T1A 12' dia. x23', white, 19000 gallon installed 1985
T1B	(T1B)	Heptane Storage Tank, Tank T1B 12' dia. x23', white, 19000 gallon installed 1985
RT1	(RT1)	Recovered Heptane Tank, Tank RT1 12' dia. x23', white, 19000 gallon installed 1992
RT2	(RT2)	Recovered Heptane Tank, Tank RT2 12' dia. x23', white, 19000 gallon installed 1992
T5A	(T5A)	#2 Fuel Oil Tank, Tank T5A 12' dia. x23', white, 19000 gallon installed 1985
T5B	(T5B)	#2 Fuel Oil Tank, Tank T5B 12' dia. x23', white, 19000 gallon installed 1985

APPLICABLE REGULATIONS:

40 CFR Part 60, Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels; applies to each storage vessel with a capacity greater than or equal to 40 cubic meters (10,567 gallons) that is used to store volatile organic liquids (including petroleum liquid storage vessels) for which construction commenced after July 23, 1984.

1. **Operating Limitations:** None
2. **Emission Limitations:** None
3. **Testing Requirements:** None
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:** For the life of each storage tank the permittee shall keep readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel. § 60.116 (b).
6. **Specific Reporting Requirements:** None
7. **Specific Control Equipment Operating Conditions:** None
8. **Alternate Operating Scenarios:** None

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**HAP STORAGE TANKS**

T3	(T3)	MIBK Storage Tank, Tank T3 12' dia. x18', white, 15000 gallon installed 1985
T4	(T4)	Toluene Storage Tank, Tank T4 12' dia. x18', white, 15000 gallon installed 1985

Description: Included with the two (2) HAP storage tanks above are the transfer rack(s) at which organic liquids are unloaded out of transport vehicles and into the storage tanks; the transport vehicles themselves while they are unloading organic liquids at transfer racks; and equipment leak components in organic liquids service that are associated with pipelines and with storage tanks and transfer racks storing, loading, or unloading organic liquids.

APPLICABLE REGULATIONS:

40 CFR Part 60, Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels; applies to each storage vessel with a capacity greater than or equal to 40 cubic meters (10,567 gallons) that is used to store volatile organic liquids (including petroleum liquid storage vessels) for which construction commenced after July 23, 1984.

40 CFR Part 63, Subpart EEEE—National Emissions Standards for Hazardous Air Pollutants: Organic Liquids Distribution; applies to the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP. The affected source is all storage tanks storing organic liquids, all transfer racks at which organic liquids are unloaded out of transport vehicles and/or containers, all transport vehicles while they are loading or unloading organic liquids at transfer racks, and all equipment leak components in organic liquids service. An affected source is a new affected source if construction commenced after April 2, 2002.

1. **Operating Limitations:** None
2. **Emission Limitations:** None
3. **Testing Requirements:** None
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:**
 - A. For the life of each storage tank the permittee shall keep readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel. § 60.116 (b).
 - § 63.2390
 - B. The permittee must keep all records to this subpart that are applicable, including records related to notifications and reports and performance evaluation plans.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**HAP STORAGE TANKS****5. Specific Recordkeeping Requirements: (continued)**

- C. As specified in §63.10(b)(1), the permittee must keep files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- D. The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

6. Specific Reporting Requirements:

Sec. 63.2386

- A. The first Compliance report must cover the period beginning February 5, 2007 and ending on June 30, 2007. The first Compliance report must be postmarked no later than July 31, 2007.
- B. Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent Compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- C. The Compliance report must contain all information specified in below.
 - (1) Company name and address.
 - (2) Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - (4) A listing of all emission sources that are part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart.

7. Specific Control Equipment Operating Conditions: None**8. Alternate Operating Scenarios: None**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02 (PCT1-PCT3) Three (3) Parts Cleaning Tanks (Cold Cleaners)

Manufacturer: Custom, 8'L x 3'W x 4'H
Maximum continuous rating: Batch operation
Emission Controls: Covers and remote solvent reservoirs
Construction commenced: November 1985

APPLICABLE REGULATIONS:

401 KAR 59:185, New solvent metal cleaning equipment, is applicable to each affected facility commenced on or after June 29, 1979, that is part of a major source located in a county or portion of a county designated attainment or marginal non-attainment for ozone.

1. Operating Limitations:

401 KAR 59:185, Section 4 (2)

- A. Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers.
- B. The degreaser covers shall be closed if not handling parts in the cleaners.
- C. Cleaned parts shall be drained for a minimum of fifteen (15) seconds, or until dripping ceases, whichever is longer.
- D. The flushing of parts with a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. The solvent flow shall be directed downward to avoid turbulence at the air-solvent interface so as to prevent the solvent from splashing outside of the cold cleaner.
- E. Work area fans shall be positioned so that air is not directed across the opening of the cold cleaner.
- F. The use of an air-agitated solvent bath is prohibited. A pump-agitated solvent bath shall be operated so as to produce no observable splashing of the solvent against either the tank wall or the parts that are being cleaned.
- G. The cold cleaner shall be free of all liquid leaks. Auxiliary cleaning equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible leaks, tears, or cracks.
- H. Spills that occur during solvent transfer shall be cleaned immediately. Wipe rags, or other absorbent equipment and materials, used to clean the spill shall be stored in a covered container for disposal unless storage of these items is prohibited by fire protection authorities.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. **Emission Limitations:** None
3. **Testing Requirements:** If deemed necessary, the Cabinet may require testing by using appropriate EPA Methods, at such times as maybe required by the Cabinet in accordance with Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:**
 - A. Monthly records should be kept of all solvents purchased and used during the month, including the type of solvent and the VOC and HAP content of each solvent used.
 - B. The permittee shall keep monthly records of the amount of waste solvent shipped off-site for disposal.
 - C. The VOC and HAP emitted each month shall be assumed to be equal to the amount of VOC and HAP in the solvent purchased and used during the month. The VOC and/or HAP content of any cleaning solvent recovered that is collected and shipped off-site for disposal may be subtracted from the total when calculating emissions, provided that there is a record of the amount shipped off-site and the permittee knows the VOC and/or HAP content of the waste material thorough EPA test methods or a Division approved alternative.
6. **Specific Reporting Requirements:**

The permittee shall report sourcewide VOC and HAP emissions as part of the semiannual reporting as required in Section F (5) & (6).
7. **Specific Control Equipment Operating Conditions:** None
8. **Alternate Operating Scenarios:** None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

09 (PSB-1) Spray Paint Booth for Facility Maintenance Operations

Manufacturer: Devilbiss

Maximum continuous rating: 0.25 gal/hour

Emission Controls: dry filters (90% eff.)

Construction commenced: November 1985

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. **Operating Limitations:** The particulate filters shall be in place anytime the spray booths are in operation.
2. **Emission Limitations:**
 - A. 401 KAR 59:010
 - (1) Section 3(1)(a) limits visible emissions from each stack to less than 20% opacity.
 - (2) Section 3(2) limits emissions of particulate matter from each spray booth to a maximum of 2.34 lbs/hr.
 - Compliance Demonstration Method:**
 - (1) See **4. Monitoring Requirements**
 - (2) See **5. Recordkeeping Requirements**
3. **Testing Requirements:** If deemed necessary, the Cabinet may require testing by using appropriate EPA Methods, at such times as maybe required by the Cabinet in accordance with Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.
4. **Specific Monitoring Requirements:**
 - A. Resistance to airflow across the booth filters shall be monitored by use of a magnahelic gauge, manometer or other means, as an indicator of the need for filter maintenance. Readings from the chosen instrument shall be taken at a minimum of once each 8 hours of operation.
 - B. The permittee shall perform a qualitative visual observation of the opacity of emissions from the roof top vents at least once per operating month and maintain a log of the observations. If visible emissions from the vents are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
5. **Specific Recordkeeping Requirements:**
 - A. Monthly records should be kept of all coatings, thinners, clean-up solutions used, including the type, amount, VOC content by weight percent, less any water and/or exempt solvent.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements: (Continued)**

- B. Monthly records shall be kept of all materials containing HAP(s) used for the above affected facilities, including the product type, amount used and the weight percentages of all individual HAPs.
- C. Monthly records shall be kept of all materials containing VOC used for the above affected facilities, including the product type, amount used and the weight percentage of VOC in each material used.
- D. For each line monthly records (including MSDS) shall be maintained by the source for the most recent two (2) year period. These records shall be made available to the cabinet or the U.S. EPA upon request.
- E. The permittee shall maintain a log of the pressure drop readings across the fabric filters, including the time, date, identity of the personnel making the record, and dates of filter replacements. For any booth that is not in operation on a given date, this fact should also be noted.

6. Specific Reporting Requirements:

The permittee shall submit a copy of the control device inspection and repair log for those times when corrective actions are required, either due to an opacity exceedance as noted in Section B (4) B, or due to problems with the dry filters, noted as required by Section B (5) E. Copies of these records shall be submitted as a part of the semiannual reporting as required in Section F (5) & (6).

7. Specific Control Equipment Operating Conditions: The particulate filters should be changed in accordance with manufacturer recommendations.**8. Alternate Operating Scenarios:** None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
Utilities	
1. Diesel Generator – Backup (14.8 gallons/hr)	n/a
2. Domestic Hot Water Boiler (0.075 MMBtu/hr)	n/a
3. Domestic Hot Water Boiler (0.08 MMBtu/hr)	n/a
4. Domestic Hot Water Boiler (0.12 MMBtu/hr)	n/a
Quality Lab	
5. Chemical Hood	n/a
6. Chemical Hood	n/a
7. Lab Drying Oven 1-3 (1985)	n/a
8. Lab Drying Oven 4 (10/1996)	n/a
9. Laboratory Fume Hood 1	n/a
10. Laboratory Fume Hood 2	n/a
11. Laboratory Fume Hood 3	n/a
Fire Pumphouse	
12. Diesel Storage Tank	n/a
13. Fire Protection Water Boiler (0.0016 MMBtu/hr)	n/a
14. Pumphouse – Gas Space (0.063 MMBtu/hr)	n/a
15. Pumphouse – Gas Space (0.063 MMBtu/hr)	n/a
16. Pumphouse Engine (14.8 gallons/hr)	n/a
Maintenance	
17. Parts Cleaning Tank 3	n/a
18. Parts Washer	n/a
19. Parts Washer	n/a
Tape Maintenance	
20. Beringer JCP Jet Cleaner	n/a
21. Safety Kleen Tank	n/a
22. Sandblaster w/ filter, enclosed system, 775 cfm	401 KAR 59:010
23. Sandblaster w/ filter, enclosed system, 775 cfm	401 KAR 59:010
24. Sandblaster w/ filter, enclosed system, 775 cfm	401 KAR 59:010
Miscellaneous	
25. Baler and Baler Dust Collector	401 KAR 59:010
26. Urethane LAB Storage Tank (6800 Gallons)	n/a
27. Urethane LAB Storage Tank (6800 Gallons)	n/a
28. South Raildock Dust Collector – Rubber	401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (Continued)

Description

Generally Applicable Regulation

Solvent Recovery

29. IPA Holding Tank (SRU)	n/a
30. IPA Reflux Tank (CRU)	n/a
31. IPA Storage Tank (SRU) (6000 gallons/year)	n/a
32. IPA/Water Tank	n/a

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS

1. **Emission Limitations**

- A. 40 CFR Part 60, Subpart RR—Pressure Sensitive Tape and Label Coating**
- 40 CFR Part 63, Subpart JJJJ— Paper and Other Web Coating**
- 40 CFR Part 63, Subpart KK—Printing and Publishing Industry**
- 401 KAR 51:017—Prevention of significant deterioration of air quality**
- 401 KAR 59:210—New fabric, vinyl and paper surface coating operations**
- 401 KAR 59:212—New graphic arts facilities using rotogravure and flexography**

Compliance Demonstration Methods:

Except for CEM, VOC and HAP emissions for the regulations above shall be determined by material balance. Raw material usage including VOC and HAP input to the source shall be supported by purchasing records, material safety data sheets, method 24 tests, method 311 tests or material formulation sheets, as described below. VOC and HAP emissions will be calculated using the appropriate factors for capture and control as demonstrated by most recent performance test.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

Compliance Demonstration Method Summary

<u>Section</u>	<u>Description</u>	<u>Equation</u>
D.2	<u>Testing Materials for VOC, HAP, and Solids Content</u>	
D.2.A	Volatile Organic and Coating Solids Content	
D.2.B	Organic HAP Content	
D.3	<u>Compliance Demonstration for use of Compliant Coatings</u>	
D.3.A	Use of "as-purchased" compliant coating materials	
D.3.B	Use of "as-applied" compliant coating materials to meet mass fraction of coating material standards	
	Monthly average as-applied HAP mass fraction of each coating material	Eq. 1a
	Monthly average as-applied VOC mass fraction of each coating material	Eq. 1b
	Daily average as-applied VOC mass fraction of each coating material	Eq. 1c
D.3.C	Use of "as-applied" compliant coating materials to meet mass fraction of coating solids standards	
	Monthly average as-applied solids content of each coating	Eq. 2
	Monthly average as-applied HAP to coating solids ratio of each coating material	Eq. 3a
	Monthly average as-applied VOC to coating solids ratio of each coating material	Eq. 3b
D.3.D	Average organic HAP or VOC content of all coating materials "as-applied" is less than the applicable mass percent emission limits.	
	Monthly average as-applied HAP mass fraction of all coating materials	Eq. 4a
	Monthly average as-applied VOC mass fraction of all coating materials	Eq. 4b
	Daily average as-applied VOC mass fraction of all coating materials	Eq. 4c
D.3.E	Average organic HAP or VOC content of all coating materials "as-applied" is less than the applicable mass fraction of coating solids emission limits.	
	Monthly average as-applied HAP content of all coating materials as a fraction of the mass of coating solids	Eq. 5a
	Monthly average as-applied VOC content of all coating materials as a fraction of the mass of coating solids	Eq. 5b
D.4	<u>Compliance Demonstration by Use of a Control Device</u>	
D.4.A	Daily VOC emissions	Eq. 6
D.4.B	Monthly HAP emissions	Eq. 7
	Monthly VOC emissions	Eq. 8
D.4.C	Mass of HAP emitted per month as a fraction of the mass of coating materials used	Eq. 9
	Mass of VOC emitted per month as a fraction of the mass of coating materials used	Eq. 10
D.4.D	Mass of HAP emitted per month as a fraction of the mass of coating solids applied	Eq. 11
	Mass of VOC emitted per month as a fraction of the mass of coating solids applied	Eq. 12

**SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE
DEMONSTRATION METHODS (CONTINUED)****2. Testing Materials for VOC, HAP, and Solids content**

The permittee shall use the following methods for determination of VOC, HAP, and Solids content of coating materials.

A. Volatile Organic and Coating Solids Content, § 63.3360(d).**(1) Method 24**

The permittee may determine the volatile organic and coating solids mass fraction of each coating applied using Method 24 (40 CFR part 60, appendix A.) The Method 24 determination may be performed by the manufacturer of the material and the results provided.

(2) Formulation data

The permittee may determine the volatile organic content and coating solids content of a coating material based on formulation data and may rely on volatile organic content data provided by the manufacturer of the material. In the event of any inconsistency between the formulation data and the results of Method 24 of 40 CFR part 60, appendix A, and the Method 24 results are higher, the results of Method 24 will govern.

B. Organic HAP Content, § 63.3360(c).**(1) Method 311**

The permittee may test the coating material in accordance with Method 311 of appendix A of 40 CFR Part 63. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the owner or operator. The organic HAP content must be calculated according to the criteria and procedures in paragraphs (c)(1)(i) through (iii) of section § 63.3360; (i through iii below).

(i) Include each organic HAP determined to be present at greater than or equal to 0.1 mass percent for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and greater than or equal to 1.0 mass percent for other organic HAP compounds.

(ii) Express the mass fraction of each organic HAP you include according to paragraph (c)(1)(i) of this section as a value truncated to four places after the decimal point (for example, 0.3791).

(iii) Calculate the total mass fraction of organic HAP in the tested material by summing the counted individual organic HAP mass fractions and truncating the result to three places after the decimal point (for example, 0.763).

(2) Method 24

Determine the volatile organic content as mass fraction of nonaqueous volatile matter and use it as a substitute for organic HAP using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the coating, § 63.3360(c)(2).

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

B. Organic HAP Content, (Continued).

(3) Formulation data

The permittee may use formulation data to determine the organic HAP mass fraction of a coating material. Formulation data may be provided to the owner or operator by the manufacturer of the material. In the event of an inconsistency between Method 311 (appendix A of 40 CFR part 63) test data and a facility's formulation data, and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for OSHA defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, § 63.3360(c)(3).

C. Alternative Test Methods for Coating Materials

Authority to approve alternative test methods for organic HAP content determination, § 63.3360(c); and for volatile matter determination, § 63.3360(d) remains with the U.S. EPA, § 63.3420(b).

3. Compliance Demonstration Methods for use of Compliant Coatings

The following methods are to be used for demonstrating compliance with emission limitations through the use of low VOC and HAP containing materials.

A. Use of “as-purchased” compliant coating materials

- (1) The permittee may demonstrate compliance with an emission standard by showing that *each coating material* applied, “as-purchased” at an affected source meets the applicable mass fraction of coating or mass fraction of solids standard.
- (2) Determine the VOC and/or HAP content of each coating material using the methods specified in **Section D.2 (A&B)** of this permit.
- (3) If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied VOC mass fraction is equal to the as-purchased VOC mass fraction and the as-applied coating solids content is equal to the as-purchased coating solids content, § 63.3360(d)(3).
- (4) If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied organic HAP mass fraction is equal to the as-purchased organic HAP mass fraction, § 63.3360(c)(4).

B. Use of “as-applied” compliant coating materials to meet mass fraction of coating material standards

- (1) The permittee may demonstrate compliance with an emission standard by showing that *each coating material* “as-applied” at an affected source meets the applicable mass fraction of coating standard.
- (2) The permittee must calculate the as-applied organic HAP (or VOC) content of as-purchased coating materials which are reduced, thinned, or diluted prior to application, § 63.3370(c)(1).

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

B. Use of “as-applied” compliant coating materials to meet mass fraction of coating material standards (Continued)

- (3) Determine the organic HAP content or volatile organic content of each coating material on an as purchased basis in accordance with **Section D.2** of this permit.
- (4) Calculate the *average monthly*, as-applied organic HAP content of *each coating material* using Equation 1a of this section: (§ 63.3370(c)(1)(ii)).

$$C_{ahi} = \frac{\left(C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 1a}$$

Where:

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, lb/lb.

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

q = number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

- (5) Alternatively, calculate the *average monthly*, as-applied volatile organic content of *each coating material* using Equation 1b of this section: (§ 63.3370(c)(1)(ii)).

$$C_{avi} = \frac{\left(C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 1b}$$

Where:

C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, lb/lb.

C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, lb.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

B. Use of “as-applied” compliant coating materials to meet mass fraction of coating material standards (Continued)

- (6) If the *daily average* volatile organic content of *each coating material* as delivered to the applicators contains no more than 2.9 lb/gal VOC, Equation 1c, the affected facility is exempt from the emission limitation of 401 KAR 59:210, Section 3. [59:210, Section 6(1)].

$$C_{agi} = \frac{C_{gi}G_i + \sum_{j=1}^q C_{gij}G_{ij}}{G_i + \sum_{j=1}^q G_{ij}} \quad \text{Eq. 1c}$$

Where:

- C_{agi} = Daily average, as-applied, volatile organic content of coating material, i, expressed as a weight fraction, lb/gal.
 C_{gi} = Volatile organic content of coating material, i, expressed as a weight fraction, lb/gal.
 G_i = Number of gallons of as-purchased coating material, i, applied each day.
 q = Number of different materials added to the coating material.
 C_{gij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a weight fraction, lb/gal.
 G_{ij} = Number of gallons of material, j, added to as-purchased coating material, i, during the day.

C. Use of “as-applied” compliant coating materials to meet mass fraction of coating solids standards.

- (1) The permittee may demonstrate compliance with an emission standard by showing that *each coating material*, “as-applied” at an affected source meets the applicable mass fraction of coating solids standards.
- (2) Calculate the *monthly average*, as-applied coating solids content of coating materials which are reduced, thinned, or diluted prior to application, using Equation 2 of this section:

$$C_{asi} = \frac{\left(C_{si}M_i + \sum_{j=1}^q C_{sij}M_{ij} \right)}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 2}$$

Where:

- C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, lb/lb.
 C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, lb/lb.
 M_i = Mass of as-purchased coating material, i, applied in a month, lb.
 q = Number of different materials added to the coating material.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

C. Use of “as-applied” compliant coating materials to meet mass fraction of coating solids standards. (Continued)

C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as-purchased coating material, i, in a month, lb.

- (3) Calculate the **monthly average**, as-applied organic HAP to coating solids ratio of **each coating material** using Equation 3a of this section:

$$H_{si} = \frac{C_{ahi}}{C_{asi}} \quad \text{Eq. 3a}$$

Where:

H_{si} = As-applied, organic HAP to coating solids ratio of coating material, i.

C_{ahi} = Monthly average, as-applied, organic HAP content of coating material, i, expressed as a mass fraction, lb/lb.

C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, lb/lb.

- (4) Alternatively, calculate the **monthly average**, as-applied VOC to coating solids ratio of **each coating material** using Equation 3b of this section:

$$V_{si} = \frac{C_{avi}}{C_{asi}} \quad \text{Eq. 3b}$$

Where:

V_{si} = As-applied, VOC to coating solids ratio of coating material, i.

C_{avi} = Monthly average, as-applied, volatile organic content of coating material, i, expressed as a mass fraction, lb/lb.

C_{asi} = Monthly average, as-applied, coating solids content of coating material, i, expressed as a mass fraction, lb/lb.

D. Average organic HAP or VOC content of all coating materials “as-applied” is less than the applicable mass percent emission limits.

- (1) The permittee may demonstrate compliance with an emission standard by showing that the **monthly average** VOC or HAP content of **all coating materials** “as-applied” at an affected source meets the applicable mass fraction of coatings standards.
- (2) Calculate the **monthly average** as-applied organic HAP content of **all coating materials** applied by Equation 4a of this section:

$$H_L = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 4a}$$

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

D. Average organic HAP or VOC content of all coating materials “as-applied” is less than the applicable mass percent emission limits. (Continued)

Where:

H_L = Monthly average, as-applied, organic HAP content of all coating materials applied, expressed as lb organic HAP per lb of coating material applied, lb/lb.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i , applied in a month, lb.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j , added to as purchased coating material, i , in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, kg. The value of this term will be zero in all cases except where you choose to take into account the volatile matter retained in the coated web or otherwise not emitted to the atmosphere for the compliance demonstration procedures in § 63.3370.

- (3) Alternatively, calculate the **monthly average** as-applied VOC content of **all coating materials** applied by Equation 4b of this section:

$$V_L = \frac{\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} - M_{vret}}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 4b}$$

Where:

V_L = Monthly average, as-applied, VOC content of all coating materials applied, expressed as lb VOC per lb of coating material applied, lb/lb.

p = Number of different coating materials applied in a month.

C_{vi} = Volatile organic content of coating material, i , expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i , applied in a month, lb.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j , added to as purchased coating material, i , in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

D. Average organic HAP or VOC content of all coating materials “as-applied” is less than the applicable mass percent emission limits. (Continued)

- (4) The permittee may show compliance with 401 KAR 59:210, Section 6, Exemption (1), by demonstrating that the **daily average** volatile organic content of **all coating materials** as delivered to the applicators is less than 2.9 lb/gal, by using Equation 4c:

$$V_G = \frac{\sum_{i=1}^p C_{gi} G_i + \sum_{j=1}^q C_{gij} G_{ij}}{\sum_{i=1}^p G_i + \sum_{j=1}^q G_{ij}} \quad \text{Eq. 4c}$$

Where:

V_G = Daily average, as-applied, VOC content of all coating materials applied, expressed as lb VOC per gallon of coating material applied, lb/gal.

p = Number of different coating materials applied in a month.

C_{gi} = Volatile organic content of coating material, i , expressed as a weight fraction, lb/gal.

G_i = Number of gallons of as-purchased coating material, i , applied each day.

q = Number of different materials added to the coating material.

C_{gij} = Volatile organic content of material, j , added to as-purchased coating material, i , expressed as a weight fraction, lb/gal.

G_{ij} = Number of gallons of material, j , added to as-purchased coating material, i , during the day.

E. Average organic HAP or VOC content of all coating materials “as-applied” is less than the applicable mass fraction of coating solids emission limits.

- (1) The permittee may demonstrate compliance with an emission standard by showing that the **monthly average** VOC or HAP content of **all coating materials** “as-applied” at an affected source meets the applicable mass fraction of coating solids standards.
- (2) Calculate the monthly average as-applied organic HAP content on the basis of coating solids applied, by Equation 5a of this section:

$$H_s = \frac{\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij}} \quad \text{Eq. 5a}$$

Where:

H_s = Monthly average, as-applied, organic HAP to coating solids ratio, lb organic HAP/lb coating solids applied.

p = Number of different coating materials applied in a month.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

E. Average organic HAP or VOC content of all coating materials “as-applied” is less than the applicable mass fraction of coating solids emission limits. (Continued)

C_{hi} = Organic HAP content of coating material, i, as-purchased, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as purchased coating material, i, in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.

C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, lb/lb.

C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

- (3) Alternatively, calculate the **monthly average** as-applied VOC content of **all coating materials** on the basis of coating solids applied by Equation 5b of this section:

$$V_s = \frac{\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} - M_{vret}}{\sum_{i=1}^p C_{si} M_i + \sum_{j=1}^q C_{sij} M_{ij}} \quad \text{Eq. 5b}$$

Where:

V_s = Monthly average, as-applied, VOC to coating solids ratio, lb VOC / lb coating solids applied.

p = Number of different coating materials applied in a month.

C_{vi} = Volatile organic content of coating material, i, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

q = Number of different materials added to the coating material.

C_{vij} = Volatile organic content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as purchased coating material, i, in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.

C_{si} = Coating solids content of coating material, i, expressed as a mass fraction, lb/lb.

C_{sij} = Coating solids content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

4. Compliance Demonstration by Use of a Control Device

The following equations are to be used for demonstrating compliance with emission limitations, when emissions from an affected facility are routed to a control device.

- A. 401 KAR 59:210, Section 4 (5), Compliance on one (1) coating line with VOC emission limits shall be based on an averaging period not to exceed twenty-four (24) hours.

- (1) Determine the VOC content of all materials used in accordance to Method 24 or the Manufacturers formulation data as described in Section D(2)(A)(1 & 2).
- (2) VOC input to an affected facility is equal to the sum of the VOC weight fraction of each VOC containing material used at an affected facility each day.
- (3) Calculate the VOC emitted *each day* using Equation 6:

$$V_e = [1 - R] \left[\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} - M_{vret} \right] \quad \text{Eq. 6}$$

Where:

V_e = Total daily VOC emitted, lb.

R = $(E)(CE)/100$ = Overall organic control efficiency, percent. Where:

E = Organic volatile matter control efficiency of the control device, percent.

CE = Organic volatile matter capture efficiency of the capture system, percent.

p = Number of different coating materials applied each day.

C_{vi} = Volatile organic content of coating material, i, as-purchased, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i, applied in a month, lb.

q = Number of different materials added to the coating material.

C_{vij} = VOC content of material, j, added to as-purchased coating material, i, expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j, added to as purchased coating material, i, in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.

- (4) The permittee is in compliance if the VOC emitted is fifteen (15) percent or less than the VOC input to the affected facility as calculated each day.

- B. Calculate the organic HAP emitted *during the month* using Equation 7 of this section:

$$H_e = [1 - R] \left[\sum_{i=1}^p C_{hi} M_i + \sum_{j=1}^q C_{hij} M_{ij} - M_{vret} \right] \quad \text{Eq. 7}$$

Alternatively, calculate the VOC emitted *during the month* using Equation 8:

$$V_e = [1 - R] \left[\sum_{i=1}^p C_{vi} M_i + \sum_{j=1}^q C_{vij} M_{ij} - M_{vret} \right] \quad \text{Eq. 8}$$

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

4. Compliance Demonstration by Use of a Control Device (Continued)

Where:

H_e = Total monthly organic HAP emitted, lb.

V_e = Total monthly VOC emitted, lb.

$R = (E)(CE)/100$ = Overall organic control efficiency, percent. Where:

E = Organic volatile matter control efficiency of the control device, percent.

CE = Organic volatile matter capture efficiency of the capture system, percent.

p = Number of different coating materials applied in a month.

C_{hi} = Organic HAP content of coating material, i , as-purchased, expressed as a mass fraction, lb/lb.

C_{vi} = Volatile organic content of coating material, i , as-purchased, expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i , applied in a month, lb.

q = Number of different materials added to the coating material.

C_{hij} = Organic HAP content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.

C_{vij} = VOC content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j , added to as purchased coating material, i , in a month, lb.

M_{vret} = Mass of volatile matter retained in the coated web after curing or drying, or otherwise not emitted to the atmosphere, lb.

C. If demonstrating compliance based on a coating mass standard:

- (1) Calculate the organic HAP emission rate based on the mass of coating material applied using Equation 9 of this section:

$$S_h = \frac{H_e}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 9}$$

- (2) Alternatively, calculate the VOC emission rate based on the mass of coating material applied using Equation 10:

$$S_v = \frac{V_e}{\sum_{i=1}^p M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq. 10}$$

Where:

S_h = Mass organic HAP emitted per mass of material applied, lb/lb.

S_v = Mass VOC emitted per mass of material applied, lb/lb.

H_e = Total monthly organic HAP emitted, lb.

V_e = Total monthly VOC emitted, lb.

p = Number of different coating materials applied in a month.

M_i = Mass of as-purchased coating material, i , applied in a month, lb.

q = Number of different materials added to the coating material.

M_{ij} = Mass of material, j , added to as purchased coating material, i , in a month, lb.

SECTION D - SOURCE EMISSION LIMITATIONS AND COMPLIANCE DEMONSTRATION METHODS (CONTINUED)

4. Compliance with Emission Limitations by Use of a Control Device (Continued)

D. If demonstrating compliance based on a mass of coating solids standard:

- (1) Calculate the organic HAP emission rate based on the mass of coating solids applied using Equation 11 of this section:

$$L_h = \frac{H_e}{\sum_{p=1}^p C_{si} M_i + \sum_{q=1}^q C_{sij} M_{ij}} \quad \text{Eq. 11}$$

- (2) Alternatively, calculate the VOC emission rate based on the mass of coating solids applied using Equation 12 of this section:

$$L_v = \frac{V_e}{\sum_{p=1}^p C_{si} M_i + \sum_{q=1}^q C_{sij} M_{ij}} \quad \text{Eq. 12}$$

Where:

L_h = Mass organic HAP emitted per mass of coating solids applied, lb/lb.

L_v = Mass VOC emitted per mass of coating solids applied, lb/lb.

H_e = Total monthly organic HAP emitted, lb.

V_e = Total monthly VOC emitted, lb.

p = Number of different coating materials applied in a month.

C_{si} = Coating solids content of coating material, i , expressed as a mass fraction, lb/lb.

M_i = Mass of as-purchased coating material, i , applied in a month, lb.

q = Number of different materials added to the coating material.

C_{sij} = Coating solids content of material, j , added to as-purchased coating material, i , expressed as a mass fraction, lb/lb.

M_{ij} = Mass of material, j , added to as purchased coating material, i , in a month, lb.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. Continuous Parameter Monitoring Systems (CPMS)**A. Thermal Oxidizers**

- (1) The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the solvent destruction device's exhaust gases. The monitoring device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 °C, § 60.445(e).
- (2) The thermocouple or temperature sensor must be installed in the combustion chamber at a location in the combustion zone, § 63.3350(e)(9)(ii).
- (3) The calibration of the chart recorder, data logger, or temperature indicator must be verified every 3 months and after every deviation or the chart recorder, data logger, or temperature indicator must be replaced. If the equipment cannot be calibrated properly it must be replaced, § 63.3350(e)(9)(i). Calibration methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.
- (4) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.
- (5) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

B. Capture System Monitoring

- (1) For any affected facility utilizing a control device, which uses a hood or enclosure to capture fugitive VOC emissions, the permittee shall install, calibrate, maintain, and operate a monitoring device which continuously indicates that the hood or enclosure is operating, § 60.445(g).
- (2) In all cases the design of any control system shall be subject to approval by the Cabinet, 59:210 Section 4(1).
 - (i) **Capture Efficiency Monitoring with Flow Measurements**
Each flow measurement device must meet the following requirements:
 - a) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

**SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS
(CONTINUED)**

- (i) Capture Efficiency Monitoring with Flow Measurements (Continued)
 - b) Use a flow sensor with an accuracy of at least 10 percent of the flow.
 - c) Perform an initial sensor calibration in accordance with the manufacturer's requirements.
 - d) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
 - e) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.
 - f) Perform leak checks monthly.
 - g) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

- (ii) Capture Efficiency Monitoring with Pressure Drop Measurements
Each pressure drop measurement device must meet the following requirements:
 - a) Locate the pressure sensor(s) in or as close as possible to a position that provides a representative measurement of the pressure drop across each opening monitored.
 - b) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.
 - c) Perform an initial calibration of the sensor according to the manufacturer's requirements.
 - d) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
 - e) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
 - f) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.
 - g) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

**SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS
(CONTINUED)****C. Capture System Monitoring Plan, § 63.3350(f)**

- (1) The permittee shall develop a site-specific monitoring plan for the capture systems.
The monitoring plan must:
 - (i) Identify the operating parameter to be monitored to ensure that the capture efficiency determined during the initial compliance test is maintained; and
 - (ii) Explain why this parameter is appropriate for demonstrating ongoing compliance; and
 - (iii) Identify the specific monitoring procedures.
- (2) The monitoring plan must specify the operating parameter value or range of values that demonstrate compliance with the emission standards in § 63.3320. The specified operating parameter value or range of values must represent the conditions present when the capture system is being properly operated and maintained.
- (3) The permittee must conduct all capture system monitoring in accordance with the plan.
- (4) The permittee shall make the monitoring plan available for inspection by the permitting authority upon request.
- (5) Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit.
- (6) The permittee shall review and update the capture system monitoring plan at least annually.

3. Continuous Emission Monitoring System (CEMS)**A. Solvent Recovery Units**

- (1) The permittee must install, calibrate, operate, and maintain the CEMS according to paragraphs (d)(1)(i) through (iii) of § 63.3350.
 - (i) Measure the total organic volatile matter mass flow rate at both the control device inlet and the outlet such that the reduction efficiency can be determined. Each continuous emission monitor must comply with performance specification 6, 8, or 9 of 40 CFR Part 60, appendix B, as appropriate.
 - (ii) The permittee must follow the quality assurance procedures in procedure 1, appendix F of 40 CFR Part 60. In conducting the quarterly audits of the monitors as required by procedure 1, appendix F, you must use compounds representative of the gaseous emission stream being controlled.
 - (iii) The permittee must have valid data from at least 90 percent of the hours during which the process is operated.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive
Suite 110
Florence, KY 41042

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, EP 61 / Cobra Line in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements.
6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(e) Acid Rain Program Requirements**

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None